# MINOR SOURCE OPERATING PERMIT OFFICE OF AIR MANAGEMENT and CITY OF INDIANAPOLIS ENVIRONMENTAL RESOURCES MANAGEMENT DIVISION

Design Industries, Inc. 51 South Koweba Lane Indianapolis, Indiana 46201

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 097-11076-00357	
Issued by: Mona A. Salem, Chief Operating Officer Department of Public Works City of Indianapolis	Issuance Date:

#### **TABLE OF CONTENTS**

#### A SOURCE SUMMARY

- A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]
- A.2 Emission Units and Pollution Control Equipment Summary

#### **B** GENERAL CONDITIONS

- B.1 Permit No Defense [IC 13]
- B.2 Definitions
- B.3 Effective Date of the Permit [IC 13-15-5-3]
- B.4 Revocation of Permits [326 IAC 2-1.1-9(5)]
- B.5 Modification to Permit [326 IAC 2]
- B.6 Minor Source Operating Permit [326 IAC 2-6.1]

#### C SOURCE OPERATION CONDITIONS

- C.1 PSD Minor Source Status [326 IAC 2-2]
- C.2 Preventive Maintenance Plan [326 IAC 1-6-3]
- C.3 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]
- C.4 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)]
- C.5 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]
- C.6 Permit Revocation [326 IAC 2-1-9]
- C.7 Opacity [326 IAC 5-1]
- C.8 Fugitive Dust Emissions [326 IAC 6-4]

#### **Testing Requirements**

C.9 Performance Testing [326 IAC 3-6]

#### **Compliance Monitoring Requirements**

- C.10 Compliance Monitoring [326 IAC 2-1.1-11]
- C.11 Monitoring Methods [326 IAC 3]
- C.12 Compliance Monitoring Plan Failure to Take Response Steps [326 IAC 1-6]
- C.13 Actions Related to Noncompliance Demonstrated by a Stack Test

#### **Record Keeping and Reporting Requirements**

- C.14 Malfunctions Report [326 IAC 1-6-2]
- C.15 Annual Emission Statement [326 IAC 2-6]
- C.16 Monitoring Data Availability [326 IAC 2-6.1-2] [IC 13-14-1-3]
- C.17 General Record Keeping Requirements [326 IAC 2-6.1-2]
- C.18 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]
- C.19 Annual Notification [326 IAC 2-6.1-5(a)(5)]

#### D.1 EMISSIONS UNIT OPERATION CONDITIONS - Paint Booths

#### **Emission Limitations and Standards**

- D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-12]
- D.1.2 Particulate Matter (PM) [326 IAC 6-3-2]
- D.1.3 Preventive Maintenance Plan [326 IAC 1-6-3]

#### **Compliance Determination Requirements**

- D.1.4 Testing Requirements [326 IAC 2-1.1-11]
- D.1.5 Particulate Matter (PM)

#### **Compliance Monitoring Requirements**

D.1.6 Monitoring

#### **Record Keeping and Reporting Requirements**

D.1.7 Record Keeping Requirements

#### D.2 EMISSIONS UNIT OPERATION CONDITIONS - Woodworking operations

#### **Emission Limitations and Standards**

- D.2.1 Particulate Matter (PM) [326 IAC 6-3-2]
- D.2.2 Baghouse Limitations [326 IAC 2-7-1(21)(G)(xxx)]

#### **Compliance Determination Requirements**

- D.2.3 Testing Requirements [326 IAC 2-1.1-11]
- D.2.4 Particulate Matter (PM) [326 IAC 2-7-1(21)(G)(xxx)]
- D.2.5 Visible Emissions Notations [326 IAC 2-7-1(21)(G)(xxx)]
- D.2.6 Baghouse Inspections [326 IAC 2-7-1(21)(G)(xxx)]

#### **Compliance Monitoring Requirements**

D.2.7 Broken Bag or Failure Detection

#### **Record Keeping and Reporting Requirements**

D.2.8 Record Keeping Requirements

Semi-Annual Report Annual Notificatio Malfunction Report

#### **SECTION A**

#### **SOURCE SUMMARY**

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) and Environmental Resources Management Division. The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

#### A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary wood office and store fixtures manufacturing plant.

Responsible Official: Design Industries, Inc.

Source Address: 51 South Koweba Lane, Indianapolis, Indiana 46201 Mailing Address: 51 South Koweba Lane, Indianapolis, Indiana 46201

Phone Number: 317-257-0267

SIC Code: 2541 County Location: Marion

County Status: Attainment for all criteria pollutants

Source Status: Minor Source, under PSD

#### A.2 Emissions units and Pollution Control Equipment Summary

This stationary source consists of the following emission units and pollution control devices:

- (a) Six (6) paint booths, identified as emission units 001 through 006, 001 and 006 are equipped with air atomization guns and 002 through 005 are equipped with HVLP spray guns, for wood furniture and cabinet coating, with a maximum capacity at each spray booth of less than one gallon of coating per hour, using dry filters for overspray control, and exhausting to stacks/vents 001 through 006 respectively.
- (b) A woodworking shop equipped with one (1) baghouse, identified as EU01, for particulate control, exhausting indoors trough S/V01.

#### SECTION B GENERAL CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

#### B.1 Permit No Defense [IC 13]

This permit to operate does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

#### B.2 Definitions

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

#### B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

#### B.4 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

#### B.5 Modification to Permit [326 IAC 2]

All requirements and conditions of this operating permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

#### B.6 Minor Source Operating Permit [326 IAC 2-6.1]

- (a) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-1.1-7(Fees) and the Code of Indianapolis and Marion County, Chapter 511.
- (b) Pursuant to 326 IAC 2-6.1-7, the Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date established in the validation letter. If IDEM, OAM, and ERMD, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied. The operation permit issued shall contain as a minimum the conditions in Section C and Section D of this permit.

#### **SECTION C**

#### **SOURCE OPERATION CONDITIONS**

#### **Entire Source**

#### C.1 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]

- (a) The total source potential to emit of volatile organic compounds is less than 250 tons per year. Therefore the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.
- (b) Any change or modification which may increase potential to emit to 250 tons per year from this source, shall cause this source to be considered a major source under PSD, 326 IAC 2-2 and 40 CFR 52.21, and shall require approval from IDEM, OAM prior to making the change.
- (c) Any change or modification which may increase potential to emit to 10 tons per year of any single hazardous air pollutant, twenty-five tons per year of any combination of hazardous air pollutants, or 100 tons per year of any other regulated pollutant from this source, shall cause this source to be considered a major source under Part 70 Permit Program, 326 IAC 2-7, and shall require approval from IDEM, OAM prior to making the change.

#### C.2 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) after issuance of this permit, including the following information on each emissions unit:
  - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAM, and ERMD upon request and shall be subject to review and approval by IDEM, OAM, and ERMD. IDEM, OAM, and ERMD may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

#### C.3 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

- (a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

> Indiana Department of Environmental Management Permits Branch, Office of Air Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

> Environmental Resources Management Division Air Quality Management Section, Data Compliance 2700 South Belmont Avenue Indianapolis, Indiana 46221

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1.

(c) The Permittee shall notify the OAM within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

#### C.4 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAM, and ERMD U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;
- (c) Inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

## C.5 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)] Pursuant to [326 IAC 2-6.1-6(d)(3)]:

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAM, Permits Branch and ERMD, within thirty (30) days of the change.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).
- (c) IDEM, OAM, and ERMD shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

#### C.6 Permit Revocation [326 IAC 2-1-9]

Pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM and ERMD, the fact that continuance of this permit is not consistent with purposes of this article.

#### C.7 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity) monitor in a six (6) hour period.

#### C.8 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

#### **Testing Requirements**

#### C.9 Performance Testing [326 IAC 3-6]

(a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Management 100 North Senate Avenue, P. O. Box 6015

Page 9 of 23 MSOP 097-11076-00357

Design Industries, Inc. Indianapolis, Indiana Permit Reviewer: Monica Dick

Indianapolis, Indiana 46206-6015

Environmental Resources Management Division Air Quality Management Section, Data Compliance 2700 South Belmont Avenue Indianapolis, Indiana 46221

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

(b) All test reports must be received by IDEM, OAM and ERMD within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAM, and ERMD, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

#### **Compliance Monitoring Requirements**

#### C.10 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

#### C.11 Monitoring Methods [326 IAC 3]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

#### C.12 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 1-6]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
  - (1) This condition;
  - (2) The Compliance Determination Requirements in Section D of this permit;
  - (3) The Compliance Monitoring Requirements in Section D of this permit;
  - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
  - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAM and ERMD upon request and shall be subject to review and approval by IDEM, OAM, and ERMD. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:

- (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
- (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
  - (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
  - (3) An automatic measurement was taken when the process was not operating; or
  - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken.

#### C.13 Actions Related to Noncompliance Demonstrated by a Stack Test

- (a) When the results of a stack test performed in conformance with Section C Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected emissions unit while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected emissions unit.

The documents submitted pursuant to this condition do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

#### **Record Keeping and Reporting Requirements**

#### C.14 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAM, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

#### C.15 Annual Emission Statement [326 IAC 2-6]

- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
  - (1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
  - (2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be submitted to:

Indiana Department of Environmental Management Technical Support and Modeling Section, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

Page 12 of 23 MSOP 097-11076-00357

Design Industries, Inc. Indianapolis, Indiana Permit Reviewer: Monica Dick

> Environmental Resources Management Division Air Quality Management Section, Data Compliance 2700 South Belmont Avenue Indianapolis, Indiana 46221

(c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, and ERMD on or before the date it is due.

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

#### C.16 Monitoring Data Availability [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM and ERMD may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

#### C.17 General Record Keeping Requirements [326 IAC 2-6.1-2]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, and ERMD representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or ERMD makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or ERMD within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:

- (1) The date, place, and time of sampling or measurements;
- (2) The dates analyses were performed;
- (3) The company or entity performing the analyses;
- (4) The analytic techniques or methods used;
- (5) The results of such analyses; and
- (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
  - (1) Copies of all reports required by this permit;
  - (2) All original strip chart recordings for continuous monitoring instrumentation;
  - (3) All calibration and maintenance records;
  - (4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C Compliance Monitoring Plan Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented when operation begins.

#### C.18 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Semi-annual Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported. The Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

Environmental Resources Management Division Air Quality Management Section, Data Compliance 2700 South Belmont Avenue Indianapolis, Indiana 46221

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, and ERMD on or before the date it is due.
- (d) Unless otherwise specified in this permit, any semi-annual report shall be submitted within thirty (30) days of the end of the reporting period. The reports do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) All instances of deviations must be clearly identified in such reports. A reportable deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
  - (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
  - (2) A malfunction as described in 326 IAC 1-6-2; or
  - (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
  - (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred or failure to monitor or record the required compliance monitoring is a deviation.

- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

#### C.19 Annual Notification [326 IAC 2-6.1-5(a)(5)]

- (a) Annual notification shall be submitted to the Office of Air Management stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.
- (c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Compliance Data Section, Office of Air Management Indiana Department of Environmental Management

Page 15 of 23 MSOP 097-11076-00357

Design Industries, Inc. Indianapolis, Indiana Permit Reviewer: Monica Dick

100 North Senate Avenue, P.O. Box 6015 Indianapolis, IN 46206-6015

Environmental Resources Management Division Air Quality Management Section, Data Compliance 2700 South Belmont Avenue Indianapolis, Indiana 46221

(d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, and ERMD on or before the date it is due.

#### **SECTION D.1**

#### **EMISSIONS UNIT OPERATION CONDITIONS**

Facility Description [326 IAC 2-7-5(15)]

Six (6) paint booths, identified as emission units 001 through 006, 001 and 006 are equipped with air atomization guns and 002 through 005 are equipped with HVLP spray guns, for wood furniture and cabinet coating, with a maximum capacity at each spray booth of less than one gallon of coating per hour, using dry filters for overspray control, and exhausting to stacks/vents 001 through 006 respectively.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

#### **Emission Limitations and Standards**

#### D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-12]

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coating applied to wood furniture and cabinets from the emission unit identified as 001 through 006, shall utilize one of the following application methods:

Airless Spray Application
Air Assisted Airless Spray Application
Electrostatic Spray Application
Electrostatic Bell or Disc Application
Heated Airless Spray Application
Roller Coating
Brush or Wipe Application
Dip-and-Drain Application

High Volume Low Pressure (HVLP) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

#### D.1.2 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the PM from each of the six (6) spray booths identified as 001 through 006, shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$
 where  $E =$  rate of emission in pounds per hour; and  $P =$  process weight rate in tons per hour

#### D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section C.2 - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

#### **Compliance Determination Requirements**

#### D.1.4 Testing Requirements [326 IAC 2-1.1-11]

The Permittee is not required to test this emissions unit by this permit. However, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance. If testing is required by IDEM or ERMD, compliance with the PM limit specified in Condition D1.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

#### D.1.5 Particulate Matter (PM)

The dry filters for PM control shall be in operation at all times when the six (6) paint booths, identified as emission units 001 through 006 are in operation.

#### Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [ 326 IAC 2-6.1-5(a)(2)]

#### D.1.6 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stacks while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C Compliance Monitoring Plan Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C Compliance Monitoring Plan Failure to Take Response Steps, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

#### Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [ 326 IAC 2-6.1-5(a)(2)]

#### D.1.7 Record Keeping Requirements

- (b) To document compliance with Condition D.1.5 and D.1.6, the Permittee shall maintain a log of daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

#### **SECTION D.2**

#### **EMISSIONS UNIT OPERATION CONDITIONS**

Facility Description [326 IAC 2-7-5(15)]; [Insignificant Activity [326 IAC 2-7-1(21)]

A woodworking shop equipped with one (1) baghouse, identified as EU01, for particulate control, exhausting indoors trough S/V01.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.2.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operation), the allowable particulate matter emission rate from the woodworking facilities shall not exceed 1.14 pounds per hour when operating at a process weight rate of 0.15 tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$  where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

#### **Compliance Determination Requirements**

#### D.2.2 Testing Requirements [326 IAC 2-1.1-11]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance. If testing is required by IDEM or ERMD, compliance with the limit specified in Condition D.2.1 and D.2.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

#### D.2.3 Particulate Matter (PM)

The baghouse for PM control shall be in operation at all times when the woodworking facilities are in operation.

#### Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

#### D.2.4 Visible Emissions Notations

- (a) Daily visible emission notations of the stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

#### D.2.5 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the woodworking operation when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

#### D.2.6 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B Emergency Provisions).
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

#### Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

#### D.2.7 Record Keeping Requirements

- (a) To document compliance with Condition D.2.4, the Permittee shall maintain records of daily visible emission notations of the baghouse stack exhaust.
- (b) To document compliance with Condition D.2.4 and D.2.5, the Permittee shall maintain records of the results of the inspections required under Condition D.2.4 and D.2.5 and the dates the vents are redirected.
- (c) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR MANAGEMENT COMPLIANCE DATA SECTION

and

# INDIANAPOLIS ENVIRONMENTAL RESOURCES MANAGEMENT DIVISION AIR QUALITY MANAGEMENT SECTION DATA COMPLIANCE

# MINOR SOURCE OPERATING PERMIT SEMI-ANNUAL COMPLIANCE MONITORING REPORT

Fource Name: Design Industries, Inc. Source Address: 51 South Koweba Lane, Indianapolis, Indiana 46201 Mailing Address: 51 South Koweba Lane, Indianapolis, Indiana 46201 MSOP No.: MSOP097-11076-00357						
Mor	nths:	to	Year: _			
This report is an affirmation that the source has met all the compliance monitoring requirements stated in this permit. This report shall be submitted semi-annually. Any deviation from the compliance monitoring requirements and the date(s) of each deviation must be reported. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".						
9 NO DEVIATIONS	OCCURRED TI	HIS REPC	RTING PERIOD.			
9 THE FOLLOWING	DEVIATIONS	OCCURR	ED THIS REPORTING	G PERIO	D.	
Compliance Mon (e.g. Permit (	itoring Require Condition D.1.3)		Number of Deviat	ions	Date of each	Deviation
	Completed By: Position:					

Attach a signed certification to complete this report.

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR MANAGEMENT COMPLIANCE DATA SECTION and

## THE CITY OF INDIANAPOLIS ENVIRONMENTAL RESOURCES MANAGEMENT DIVISION

### MINOR SOURCE OPERATING PERMIT ANNUAL NOTIFICATION

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	Design Industries, Inc.
Address:	51 South Koweba Lane,
City:	Indianapolis, Indiana 46201
Phone #:	317-267-0267
MSOP #:	MSOP097-11076-00357

I hereby certify that Design Industries, Inc. is 9 still in operation. 9 no longer in operation.

I hereby certify that Design Industries, Inc. is **9** in compliance with the requirements of MSOP **097-11076-00357**.

9 not in compliance with the requirements of MSOP 097-11076-00357.

Authorized Individual (typed):
Title:
Signature:
Date:
If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.
Noncompliance:

#### INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT **OFFICE OF AIR MANAGEMENT**

FAX NUMBER - 317 233-5967

and

#### THE CITY OF INDIANAPOLIS **ENVIRONMENTAL RESOURCES MANAGEMENT DIVISION FAX NUMBER - 317-327-2274**

This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER?, 25 TONS/YEAR SULFUR DIOXIDE?, 25 TONS/YEAR NITROGEN OXIDES?, 25 TONS/YEAR VOC?, 25 TONS/YEAR HYDROGEN SULFIDE?, 25 TONS/YEAR TOTAL REDUCED SULFUR ?, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS?, 25 TONS/YEAR FLUORIDES?, 100 TONS/YEAR CARBON MONOXIDE?, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT?, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT?, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD?, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2)? EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION
THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC OR, PERMIT CONDITION # AND/OR PERMIT LIMIT OF
THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ? Y
THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT? Y
COMPANY:PHONE NO. (
DOCATION: (CITY AND COUNTY) PERMIT NO AFS PLANT ID: AFS POINT ID: INSP: CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON:
DATE/TIME MALFUNCTION STARTED:// 20 AM / PM ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION:
DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE// 20 AM/PM
TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER:
ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION:
MEASURES TAKEN TO MINIMIZE EMISSIONS:
REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:
CONTINUED OPERATION REQUIRED TO PROVIDE <u>ESSENTIAL</u> * SERVICES: CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS:
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS.  CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT:  INTERIM CONTROL MEASURES: (IF APPLICABLE)
MALFUNCTION REPORTED BY: TITLE:

(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY:	DATE:	_TIME:
*SEE PAGE 2	PAGE 1 OF 2	

# Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

#### 326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

#### 326 IAC 1-2-39 "Malfunction" definition

If this item is checked on the front, please explain rationale:

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

\*Essential services are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

_	 	 	 	 

# Indiana Department of Environmental Management Office of Air Management and The City of Indianapolis

#### The City of Indianapolis Environmental Resources Management Division

# Technical Support Document (TSD) for a **Minor Source Operating Permit**

#### **Source Background and Description**

Source Name: Design Industries, Inc.

Source Location: 51 South Koweba Lane, Indianapolis, Indiana 46201

County: Marion SIC Code: 2541

Operation Permit No.: 097-11076-00357
Permit Reviewer: Monica Dick

The Office of Air Management (OAM) and Environmental Resource Management Division (ERMD) has reviewed an application from Design Industries, Inc. relating to the operation of manufacturing wood office and store fixtures.

#### **Permitted Emission Units and Pollution Control Equipment**

There are no permitted facilities operating at this source during this review process.

#### **Unpermitted Emission Units and Pollution Control Equipment**

The source also consists of the following unpermitted facilities/units:

- (a) Six (6) paint booths, identified as emission units 001 through 006, 001 and 006 are equipped with air atomization guns and 002 through 005 are equipped with HVLP spray guns, for wood furniture and cabinet coating, with a maximum capacity at each spray booth of less than one gallon of coating per hour, using dry filters for overspray control, and exhausting to stacks/vents 001 through 006 respectively.
- (b) A woodworking shop equipped with one (1) baghouse, identified as EU01, for particulate control, exhausting indoors trough S/V01.

#### **Stack Summary**

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
001	paint booth	23	3.5	21,800	ambient
002	paint booth	23	3.5	21,800	ambient
003	paint booth	23	3.5	21,800	ambient
004	paint booth	23	3.5	21,800	ambient
005	paint booth	23	3.5	21,800	ambient
006	paint booth	23	3.5	21,800	ambient

#### **Enforcement Issue**

- (a) IDEM and ERMD are aware that equipment has been constructed and operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled Unpermitted Emission Units and Pollution Control Equipment. A Notice of Violation (NOV) was issued April 5, 2000.
- (b) IDEM and ERMD have reviewed this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

#### Recommendation

The staff recommends to the Commissioner that the operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on July 21, 1999, with additional information received on April 14, 2000.

#### **Emission Calculations**

The calculations submitted by the applicant have been verified and found to be accurate and correct. These calculations are provided in Appendix A of this document (pages 1 through 4.)

#### **Potential To Emit**

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	7.2
PM-10	7.2
SO <sub>2</sub>	0.0
VOC	25.7
СО	0.0
NO <sub>x</sub>	0.0

HAP's	Potential To Emit (tons/year)
xylene	2.91
ethyl benzene	0.26
toulene	7.77
MEK	3.50
MIBK	3.00
TOTAL	17.44

#### **Actual Emissions**

The following table shows the actual emissions from the source. This information reflects the calculations provided in Appendix A.

Pollutant	1999 Emissions (tons/year)
PM	7.2
PM-10	7.2
VOC	25.7

#### **County Attainment Status**

The source is located in Marion County.

Pollutant	Status
PM-10	attainment
SO <sub>2</sub>	attainment
$NO_2$	attainment
Ozone	attainment
СО	attainment
Lead	attainmen <b>t</b>

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Marion County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Marion County has been classified as attainment or unclassifiable for all criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

#### **Source Status**

New Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	7.2
PM10	7.2
VOC	25.7
Single HAP	7.77
Combination HAPs	17.4

This source is not a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

#### Part 70 Permit Determination

#### 326 IAC 2-7 (Part 70 Permit Program)

This source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

This is the first air approval issued to this source.

#### **Federal Rule Applicability**

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR art 63.800, Subpart JJ) is not applicable to this source. Because, the plant site identified as Design Industries, Inc. does not meet the definition of major source defined in 40 CFR part 63, Subpart A, section 63.2.

#### State Rule Applicability - Entire Source

#### 326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than ten (10) tons per year of VOCs. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

#### 326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitation), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### State Rule Applicability - Paint booths

#### Particulate Matter

Marion County is listed under 326 IAC 6-1-7. However, neither the source nor facilities are listed in 326 IAC 6-1-12 and neither have the potential to emit one hundred (100) tons per year of PM or actuals of ten (10) tons or more of PM per year. Therefore, no 326 IAC 6-1 limits apply.

Surface coating meets the definition of "process operation". Therefore, 326 IAC 6-3-1 is applicable and the PM emissions are regulated under 326 IAC 6-3-2(c).

#### Particulate Matter (PM) (326 IAC 6-3-2)

Pursuant to 326 IAC 6-3-2, the PM from each of the six (6) spray booths identified as 001 through 006, shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$
 where  $E =$  rate of emission in pounds per hour; and  $P =$  process weight rate in tons per hour

The dry filters shall be in operation at all times the paint booths, identified as emission units 001 through 006, are in operation, in order to comply with this limit.

#### Volatile Organic Compound (326 IAC 8-2)

The paint booths were constructed after July 1, 1990, for painting wood furniture and cabinets, which is regulated under 326 IAC 8-2-12. Each of the booths have actual emissions greater than fifteen (15) pounds per day before add-on controls, therefore 326 IAC 8-2-12 applies to each booth.

#### Volatile Organic Compounds (VOC) [326 IAC 8-2-12]

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coating applied to wood furniture and cabinets from emission unit 004, shall utilize one of the following application methods:

Airless Spray Application
Air Assisted Airless Spray Application
Electrostatic Spray Application
Electrostatic Bell or Disc Application
Heated Airless Spray Application
Roller Coating
Brush or Wipe Application
Dip-and-Drain Application

High Volume Low Pressure (HVLP) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

All of the booths are equipped with HVLP guns and therefore are in compliance with 326 IAC 8-2-12.

#### State Rule Applicability - Insignificant Activity: Wood Working

#### Particulate Matter

Marion County is listed under 326 IAC 6-1-7. However, neither the source nor facilities are listed in 326 IAC 6-1-12 and neither have the potential to emit one hundred (100) tons per year of PM or actuals of ten (10) tons or more of PM per year. Therefore, no 326 IAC 6-1 limits apply.

Woodworking meets the definition of "process operation". Therefore, 326 IAC 6-3-1 is applicable and the PM emissions are regulated under 326 IAC 6-3-2(c).

Pursuant to 326 IAC 6-3-2 (Process Operation), the allowable particulate matter emission rate from the woodworking facilities shall not exceed 1.14 pounds per hour when operating at a process weight rate of 0.15 tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$
 where  $E =$  rate of emission in pounds per hour; and  $P =$  process weight rate in tons per hour

#### **Air Toxic Emissions**

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Construction Permit Application Form Y.

- (a) This source will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Clean Air Act Amendments.
- (b) See attached calculations for detailed air toxic calculations. (Appendix A, pages 1 through 4)

#### Conclusion

The operation of this manufacturing wood office and store fixtures shall be subject to the conditions of the attached proposed **Minor Source Operating Permit 097-11076-00357**.

			1998		1999
Product	lb VOC/gal	gal	lbs	gal	lbs
Lacquer Satin Tinted	5.88	33	194	76	447
Butyl Acetate	7.35	55	404	1045	7681
Thinner DI Blend #5	6.88	990	6811	358	2463
Methyl Ethtl Ketone	6.71	130	872	380	2550
Mineral Spirits	6.5	42	273	70	455
Stain	6.94	115	798	25	174
111R Lacquer Retarder	7.09	22	156	0	0
37346 Clear Vinyl Sealer	5.97	2266	13528	3383	20197
Xylol Wiping Solvent	7.25	935	6779	440	3190
PC59-3 Lacquer Pre-cat	5.6	1097	6143	385	2156
S5947 Flat Pre-cat Lacquer	5.59	825	4612	2035	11376
V7391 High Gloss Varnish	4.49	20	90	0	0
SW1648 Dover Wht Prothane Gls	5.25	5	26	50	263
102-0451 Clear Flat Lacquer	5.88	144	847	0	0
BEH-555-0007 White Pic	5.17	23	119	21	109
L61XXL2299-4338 Polo Blue	5.61	0	0	74	415
Total lbs			41,652		51,476
Total tons			20.8		25.7

1998	lbs	tons
Worset Case each Booth	13528	6.76
Worset Case Booth 6	6779	3.39
1999	lbs	tons
Worset Case each Booth	20197	10.10
Worset Case Booth 6	3190	1.60

#### 1998 HAP Emissions Design Industries

				Xylene	Ethyl	Benzene		Toluene		MEK		MIBK	
Product	Gallons	lbs/gal	lbs	%	lbs	%	lbs	%	lbs	%	lbs	%	lbs
Lacquer Stain Tinted	33	7.70	254	19.50	50	0.00	0	19.90	51	1.90	5	12.70	32
Butyl Acetate	55	7.35	404	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Thinner DI Blend #5	990	7.11	7039	0.00	0	0.00	0	76.40	5378	0.00	0	4.70	331
Methyl Ethyl Ketone	130	6.70	871	0.00	0	0.00	0	0.00	0	100.00	871	0.00	0
Mineral Spirits	42	6.50	273	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Stain	115	7.30	840	90.00	756	0.00	0	0.00	0	0.00	0	0.00	0
111R Lacquer Retarder	22	7.10	156	22.30	35	0.00	0	0.00	0	0.00	0	0.00	0
37346 Clear Vinyl Sealer	2226	7.30	16250	2.50	406	0.00	0	33.40	5428	18.00	2925	15.10	2454
Xylol Wiping Solvent	935	7.20	6732	90.00	6059	10.00	673	0.00	0	0.00	0	0.00	0
PC59-3 Lacquer Pre-Cat	1097	7.80	8557	10.00	856	1.10	94	27.10	2319	0.00	0	10.80	924
S5947 Flat Pre-Cat Lacquer	825	7.81	6443	10.00	644	1.10	71	27.10	1746	0.00	0	10.80	696
V7391 High Gloss Varnish	20	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
SW1648 Dover Wht Prothane Gls	5	7.80	39	10.00	4	1.10	0	27.10	11	0.00	0	10.80	4
102-0451 Clear Flat Lacquer	144	7.81	1125	10.00	113	1.10	12	27.10	305	0.00	0	10.80	122
BEH-555-0007 White Pic	23	7.30	168	90.00	151	0.00	0	0.00	0	0.00	0	0.00	0
L61XXL2299-4338 Polo Blue	0_	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Total Lbs					9074.00		850.00		15238.00		3801.00		4563.00
Total tons Grand Total Combined Tons:	16.76				4.54		0.43		7.62		1.90		2.28

#### 1999 HAP Emissions Design Industries

			Xylene		Ethyl Benzene	т	oluene		MEK		MIBK	
Product	lbs/gal	lbs		lbs	% lbs		, 0	lbs	%	lbs	%	lbs
Lacquer Stain Tinted	7.70	585.00	19.50	114.00	0.00	0.00	19.90	116.00	1.90	11.00	12.70	74.00
Butyl Acetate	7.35	7680.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Thinner DI Blend #5	7.11	2545.00	0.00	0.00	0.00	0.00	76.40	1944.00	0.00	0.00	4.70	120.00
Methyl Ethyl Ketone	6.70	2546.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	2546.00	0.00	0.00
Mineral Spirits	6.50	455.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stain	7.30	183.00	90.00	165.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
111R Lacquer Retarder	7.10	0.00	22.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
37346 Clear Vinyl Sealer	7.30	24696.00	2.50	617.00	0.00	0.00	33.40	8248.00	18.00	4445.00	15.10	3729.00
Xylol Wiping Solvent	7.20	3168.00	90.00	2851.00	10.00	317.00	0.00	0.00	0.00	0.00	0.00	0.00
PC59-3 Lacquer Pre-Cat	7.80	3003.00	10.00	300.00	1.10	33.00	27.10	814.00	0.00	0.00	10.80	324.00
S5947 Flat Pre-Cat Lacquer	7.81	15983.00	10.00	1589.00	1.10	175.00	27.10	4307.00	0.00	0.00	10.80	1716.00
V7391 High Gloss Varnish	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SW1648 Dover Wht Prothane Gls	7.80	390.00	10.00	39.00	1.10	4.00	27.10	106.00	0.00	0.00	10.80	42.00
102-0451 Clear Flat Lacquer	7.81	0.00	10.00	0.00	1.10	0.00	27.10	0.00	0.00	0.00	10.80	0.00
BEH-555-0007 White Pic	7.30	153.00	90.00	138.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L61XXL2299-4338 Polo Blue	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Lbs Total tons				5813.00 2.91		529.00 0.26		15535.00 7.77		7002.00 3.50		6005.00 3.00

**Grand Total Combined Tons:** 

17.44

#### **Woodworking Calculation**

Limit

Raw material being fed in (lbs/hr) = 296

convert to tons/hour = 0.15

E=4.10 P^0.67

P = process weight rate in tons per hour

 $E = 4.10(0.15^{\circ}0.67) =$ 

1.14 lbs/hour

Potential emitted to atmosphere after controls

Actual collection efficiency of the baghouse = 99.97%

Amount of sawdust (estimated) (lbs/hr) =60lbs/hr or 1200lbs/mo

Baghouse emissions

60lbs/hr\*(1-.9997) =

0.02 lbs/hour

Potential emitted to atmosphere before controls

amt collected + amt emitted = potential emitted before controls

1200lb/mo + 0.36lb/mo =

1200.36 lbs/mo

1200.36lb/mo X 12mo/yr X ton/2000lb =

7.20 TPY

Since the potential emissions to the atmosphere are less than than the allowable emissions, the wood working operations controlled by the baghouse, identified as EU01, is in compliace with 326 IAC 6-3-2.